essential nature of gravitation; discoveries are waiting to be made in this region, and it is absurd to suppose that we are already in possession of all the data. We can wait; but meanwhile we need not pretend that because we do not understand it, therefore life is an impotent nonentity. I suggest that the philosophic attitude is to observe and recognise its effects, both what it can and what it cannot achieve, and realise that our theory of it is at present extremely partial and incomplete.

Summary.

The chief contentions are:-

(1) That the fundamental laws of physics, complete and accurate as they are, in no way exclude guidance of events by the agency of life or mind or other unknown influence.

(2) That common experience shows that living creatures do exert such guidance, and further, that they are amenable to non-material or spiritual influences from each other.

The dualistic form of this language is a necessity of expression, and inevitable for practical purposes; it is not intended to imply any ultimate or philosophic dualism. The writer finds himself unable, with his present knowledge, to use language appropriate to unification, which he regards as an aim rather than as an achievement.

OLIVER J. LODGE.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE.

At a meeting of the Senate of Dublin University on April 18, the degree of doctor in science was conferred honoris causa on Sir William Abney, K.C.B.

At the graduation ceremony of the University of Glasgow on Tuesday, the honorary degree of LL.D. was conferred in absentia on Sir William Gairdner, emeritus professor of medicine in the University; and the same degree was received by Sir Norman Lockyer, K.C.B.; Dr. Thomas Oliver, professor of physiology in the University of Durham; and Mr. Philip Watts, Director of Naval Construction at the Admiralty.

At a meeting of the governors of the North Wales University College, held on April 15, it was announced that subscriptions amounting to more than 15,000l. towards providing additional buildings had been promised, among the subscribers being the King and the Prince of Wales. It was also stated that the Drapers' Company had offered 600l., payable in three annual instalments, towards the maintenance of an electrical engineering department.

The Technical Education Board of the London County Council is offering for competition five senior county scholarships, together with several senior exhibitions. The scholarships are of the value of 90L a year, and are tenable, in ordinary circumstances, for three years at universities, university colleges, or technical institutes, whether at home or abroad. They are confined to persons who are resident within the administrative county of London, and whose parents are in receipt of an income of not more than 40ol. a year from all sources. The scholarships are open to candidates under twenty-two years of age on June 1, preference being given to candidates who are under nineten years of age. No examination is held for these scholarships and exhibitions, which are awarded on consideration of the past record and future promise of the candidates. Candidates who desire to apply for the scholarships and exhibitions can obtain application forms from the secretary of the Technical Education Board, 116 St. Martin's Lane, W.C. These forms must be returned not later than Monday, May 11.

Following the suggestion of the executive committee of the Nature-Study Exhibition Association, contained in their official report, that the work of the Association would in future be carried out more satisfactorily by local organisations, certain delegated members of the Middlesex Field Club and of the Selborne Society are arranging to hold this year in London a Home Counties Nature-Study Exhibition. Lord Avebury is the chairman of the committee, and already the list of patrons is very representative. The honorary secretary, Mr. W. M. Webb, will be glad to receive at 20 Hanover Square, W., donations towards the expenses of the exhibition.

The governing body of the Royal Agricultural College, Cirencester, has decided, in consequence of the recommendation of the recent report on British forestry, to remodel and largely develop the teaching of forestry at the college in connection with the estate management branch of the curriculum. It has been resolved to create a new chair, to be entitled the chair of estate management and forestry, and to appoint thereto a special professor or lecturer who shall be required to devote all his time to the duties of the chair, and who shall have had good experience, not only of the management of woods in this country, but also of the continental system of sylviculture followed in the State and Communal forests of France and Germany.

THE Berlin correspondent of the *Times* states that on October 1 the courses of instruction are to be begun at the new military technical college which is to be established in Berlin. Not more than fifty officers, who must be of such an age that they will not attain the rank of captain while seconded for these instructional courses, will, in the first instance, be summoned to the capital. They will have to show a sufficient knowledge of mathematics and physics, and must produce proofs of their general military efficiency. The full course will last three years, but officers will have to satisfy the authorities at the end of each year that it is desirable that they should continue their studies. In connection with the military subjects of the courses of instruction, lectures will be given on mathematics, physics, mechanics, electricity, chemistry, metallurgy, and surveying.

The Senate of the University of London has approved the following scheme of courses in advanced botany, extending over the years 1903-6, drawn up by the Board of Studies in Botany. The general idea is that each course should deal with a definite branch of botanical knowledge or with the more general aspects of the science, and should extend to about ten lectures:—1903-1904—The plant in relation to the soil, Mr. A. D. Hall; the Lycopsida, Dr. D. H. Scott, F.R.S.; the metabolic processes of plants, Prof. J. Reynolds Green, F.R.S. 1904-1905—Botany and its present problems, Sir William Thiselton-Dyer, F.R.S.; the Ascomycetes, with especial reference to the typical fructifications, Mr. V. H. Blackman; respiration, Prof. J. B. Farmer, F.R.S.; the Tubifloræ, Dr. A. B. Rendle. 1905-1906—Gymnosperms, Prof. F. W. Oliver; the British flora in its ecological relations, Mr. A. G. Tansley; Bryophytes, Prof. J. B. Farmer, F.R.S.

REPRESENTATIVES from the principal universities and colleges of New York State recently met at Columbia University to determine the basis upon which the award of the two Rhodes scholarships for New York State should be made. It was decided, says Science, to entrust the administration and award of the scholarships to a committee of three, to be elected by the heads of the colleges for men. The committee will consist of President Butler, President Schurman, and Chancellor Day. The conference decided that the conditions regulating the award shall be as follows:—The candidates for the scholarships to be eligible shall have satisfactorily completed the work of at least two years in some college of liberal arts and sciences in the State. Except in extraordinary circumstances, the upper age limit shall be twenty-four years at the time of entering upon the scholarship at Oxford. To be eligible, the candidate shall be a citizen of the United States and unmarried.

SCIENTIFIC SERIAL.

Journal of Botany, April.—Two brief notes by Mr. G. West and Mr. J. Cryer refer to a Polygala identified as amarella, Crantz, which was collected on the Great Scar Limestone near Grassington.—For the East Riding of Yorkshire Mr. W. Ingham publishes a list of mosses and hepatics.—A new fossil fungus, a species of Cercosporites, is described and figured by Mr. E. S. Salmon. It was obtained from the "disodile" beds in Sicily.—Mr. S. Moore, in the identification of some plants, chiefly Compositæ, from the Transvaal, Griqualand West and British East Africa, has found several new species, for which descriptions are given.—Mr. E. S. Linton supplies a list of "Kent Rubi," and Mr. W. G. Smith has a note on a new species of Collybia.